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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	VENTOR ATTORNEY DOCKET NO.		
09/504,438	02/15/2000	Azusa Umemoto	003-0639P 7879		
7	7590 03/04/2004	EXAMINER			
Birch Stewart Kolasch & Birch LLP			KNEPPER, DAVID D		
P O Box 747 Falls Church,	VA 22040-0747		ART UNIT	PAPER NUMBER	
·			2654	/7	
			DATE MAILED: 03/04/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application	on No.	Applicant(s)				
Office Action Summary		09/504,43	8	UMEMOTO ET AL.				
		Examiner		Art Unit				
		David D. K	nepper	2654				
	- The MAILING DATE of this communi	cation appears on the	cover sheet with the o	orrespondence address	P.0			
Period fo	• •		O EVENE A MONTH	(O) EDOM				
THE N - Exten after S - If the - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOMALING DATE OF THIS COMMUNION sions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commingeriod for reply specified above is less than thirty (30 period for reply is specified above, the maximum state to reply within the set or extended period for reply exply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no every unication. of days, a reply within the state tutory period will apply and wi will, by statute, cause the apply	ent, however, may a reply be tin story minimum of thirty (30) day Il expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication (35 U.S.C. § 133).	ation.			
Status								
1)⊠	Responsive to communication(s) filed	d on <i>09 January 200</i>	4. •					
·		b) This action is n						
3)□	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims		•					
4)🛛	Claim(s) <u>1-21 and 23-32</u> is/are pendi	ng in the application.						
4	4a) Of the above claim(s) is/ar	e withdrawn from co	nsideration.					
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) 1-21 and 23-32 is/are reject	ed.						
7)	Claim(s) is/are objected to.							
8)[Claim(s) are subject to restrict	tion and/or election re	equirement.					
Application	on Papers							
9)[The specification is objected to by the	Examiner.						
10) 🔲 -	10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.							
	Applicant may not request that any object	tion to the drawing(s) b	e held in abeyance. Se	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including	•	• • • • • • • • • • • • • • • • • • • •		` '			
11)	The oath or declaration is objected to	by the Examiner. No	te the attached Office	Action or form PTO-152	<u>!</u> .			
Priority u	nder 35 U.S.C. § 119							
a)[Acknowledgment is made of a claim f All b) Some * c) None of: 1. Certified copies of the priority of 2. Certified copies of the priority of 3. Copies of the certified copies of application from the Internation	documents have bee documents have bee of the priority documental Bureau (PCT Rule	n received. n received in Applicati ents have been receive e 17.2(a)).	on No ed in this National Stage				
· S	ee the attached detailed Office actior	i for a list of the certi	ilea copies not receive	ea.				
Attachment								
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P	TO 048)	4) Interview Summary Paper No(s)/Mail D					
3) 🔲 infom	and Dransperson's Patent Drawing Review (Pnation Disclosure Statement(s) (PTO-1449 or Indoors)/Mail Date			ratent Application (PTO-152)				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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1. Applicant's correspondence filed on 9 January 2004 (paper #16) has been received and

considered. Claims 1-21 and 23-32 are pending.

Claims

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 9-13, 16-19, 20, 21 and 23-32 are rejected under 35 U.S.C. 102(b) as being

clearly anticipated by Schmandt (Audio Hallway...).

As per claim 29, an "information selector method" is taught by Schmandt's Audio

Hallway: a Virtual Acoustic Environment for Browsing:

"time-controlling a position of a plurality of sounds independently" (see figure 2,

page 166 and also the time and space relationships of differences of sound in the hallway,

figure 3, 4, pages 166, 167);

"selecting a sound" (see his entry is gained into the room, page 167, right

column); and

"switching at least one...of sounds is associated with the type of information" (the

user may travel the hallway to switch to different subjects related to sounds in different

rooms, pages 166-167 and/or the user may switch among sound files inside a room,

figures 5 and 6, page 168).

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Claims 1, 9-13, 16, 18, 19, 27 and 28 are rejected under similar arguments as applied to claim 29. Claim 29 is considered narrower in scope than any of these other claims. The relationship to similar elements is clear. Schmandt teaches an extremely versatile interface allowing the user to select desired subjects based upon traversing the virtual hallway. The sequential playback of stored sounds and their associated subjects will vary by direction and amplitude based on the user's movement in the virtual space which not only includes the 'hallway' but also the 'rooms' that the user may enter to find more subject related materials.

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Claim 2: "Controlling volume" is anticipated by the <u>amplitude</u> of figure 2.

Claim 3: "Arranging the position of each said sound on a circumference of substantially a circle" is anticipated by figures 5 and 6 described by Schmandt as showing sounds <u>situated</u> around and equidistant from the head.

Claim 4: "Commanding a position change of all of said sounds faster... returning the sound to a former position" is anticipated by his <u>hallway</u> metaphor which allows the user to navigate the hallway of sounds and control <u>acceleration</u>, page 166, bottom right.

Claim 5: "Selecting a sound of the maximum volume" is anticipated by the sounds shown in figures 2, 5 and 6.

Claim 6, 17: "Selecting a sound of interest" is the whole point of the entire article and is shown in various levels from the hallway and inside the rooms which allow the user to narrow choices based on the user's personal interests.

Claim 19: "Modifying a presentation status of said presentation means according to a predetermined condition" is anticipated by every condition and response by the user that enables the user to select where to go in the hallway and what and how to select sounds inside a room

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(see pages 164-168). Information where "the presentation position altered" is inherent in the manner in which he changes the virtual positioning of sounds in the hallway and the rooms.

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Claims 20-21, 23-28 and 30-32: A "Predetermined condition" is defined in claim 19 (see above) as limited to a "condition" that allows "presenting simultaneously a plurality of sound information with the presentation position altered". This corresponds to the virtual positioning of the rooms along the hallway AND the positioning of subject related materials within each virtual room. Therefore, the claimed properties and conditions of sound are anticipated by the ability of Schmandt's device to constantly adjust the presentation status of multiple sounds based on the position of the user as tracked both physically and within the virtual space.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 7, 8, 14 and 15 are rejected under 35 U.S.C. § 103 as being unpatentable over Schmandt in view of Evans (Mapping an Auditory Space on a Graphical User Interface).

Claims 7 and 8: It is noted that Schmandt does not explicitly teach "displaying an image". However, Evans teaches that it is obvious to map auditory space onto a GUI (see

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abstract). Schmandt shows figures 3-6 that show a pictorial depiction of how the audio is mapped out to sound to the user. It is obvious to utilize Evan's mapping with a system such as Schmandt's because Evans teaches that it is particularly helpful for the user to provide <u>auditory</u> cues integrated with the complex visual stimuli of modern graphical user interfaces (GUI) (page 807) to better emulated the user's experience of the physical world (see page 808).

Claims 14, 15: The correlation between audio and visual (noted with regard to claims 7-8 above) is considered narrower in scope that the claimed "information other than audio". "Sequentially switches and presents" such information is considered obvious because the user is able to select more than one topic (Schmandt) in sequence and mapping a relationship between audio and visual data, the sequence of selection would obviously be true for all data so mapped.

6. Claims 7, 8 14 and 15 are rejected under 35 U.S.C. § 103 as being unpatentable over Schmandt in view of Goose (A 3D Audio Only Interactive Web Browser: Using Spatialization to Convey Hypermedia Document Structure).

Claims 7 and 8: It is noted that Schmandt does not explicitly teach "displaying an image". However, Goose teaches that it is obvious to map worl wide web data and other HTML document structure onto an interactive audio browser (page 363). Schmandt shows figures 3-6 that show a pictorial depiction of how the audio is mapped out to sound to the user. It is obvious to utilize Goose's mapping with a system such as Schmandt's because Goose teaches that it is well known to combine audio and visual information both sighted and visually impaired users with access to the WWW (abstract and page 363). It is also noted that Goose teaches the relationship between mapping various structural elements in the HTML document to audible

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representations on page 367, figure 6.

Claims 14, 15: The correlation between audio and visual (noted with regard to claims 7-8

above) is considered narrower in scope that the claimed "information other than audio".

"Sequentially switches and presents" such information is considered obvious because the user is

able to select more than one topic (Schmandt) in sequence and mapping a relationship between

audio and visual data, the sequence of selection would obviously be true for all data so mapped.

Remarks

7. New art is applied in order to show more specific evidence that the claims of the instant

application are not patentable.

During the latest interview, it was also pointed out that the most prominent difference

between the prior art (Kobayashi) and the invention is that the sound field in the prior art

surrounds the user but in the applicant's device, the user is outside the sound field. It seems to

the Examiner that the spatial relationships resulting from this difference in location of the user

would be obvious.

Therefore, it would seem that the selection of topics, sounds (i.e. - sounds and their

associated topics) and spatial positions thereof must be claimed with specificity to avoid the fact

that the prior art has different topics associated with sounds that are arranged spatially so as to be

differentiated by the user.

The current prior art applied has greater flexibility than Kobayashi had regarding the

position of the user relative to the sound field.

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Prior Art

8. Mynatt (<u>Designing Audio Aura</u>) teaches that it is well known to design audio cues that relate to items in the physical world.

Pit (<u>Pointing in an Auditory Interface for Blind Users</u>) teaches that it is well known to combine Graphical user interfaces with auditory interaction.

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

TC2600 Fax Center (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Knepper whose telephone number is (703) 305-9644. The examiner can normally be reached on Monday-Thursday from 07:30 a.m.-6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (703) 305-9645.

Any inquiry of a general nature or relating to the status of this application should be directed to customer service at (703) 306-0377.

The facsimile number for TC 2600 is (703) 872-9314.

David D. Knepper Primary Examiner Art Unit 2654 Page 7